

ENVIRONMENTAL SCIENCE

In RWU's hands-on Environmental Science program, students learn interdisciplinary principles of Environmental Science, conduct and evaluate scientific research, and help communities improve their environmental well-being and sustainability. Environmental scientists play a critical role in investigating relationships between humans and the environment, managing natural resources, and communicating findings to others to help guide evidence-based decision-making about environmental problems.

STUDENT EXPERIENCE

Learn and Do More at RWU

With a focus on experiential learning at RWU, Environmental Science majors:

- Work as scientists from day one. Many students start research projects in their first year, conducting fieldwork, writing research proposals, and presenting their research at national and international conferences.
- Explore the terrestrial, marine, and coastal habitats on RWU's campus, as well as nearby forests, rock formations, and marshes. Oceanographic field trips are taken aboard one of the boats in RWU's research vessel fleet.
- Collaborate with faculty who are engaged in research in the field and lab. Our students work on projects to evaluate environmental issues such as the effects of urbanization on soils, water pollution, and sustainable fisheries management.
- Study Environmental Science in one of our short-term off-campus programs in Belize, Panama, and Yellowstone National Park. Students can also spend a full semester abroad at partner institutions in New Zealand and Australia.



- + Are you concerned about environmental issues like climate change, biodiversity loss, renewable energy, and conserving natural resources?
- + Do you enjoy working outside and want to conduct research, manage ecosystems, or help others learn about the environment?
- + Do you want to apply your scientific creativity and understanding to improve environmental quality and human well-being?

CAREER OUTLOOK

RWU Environmental Science alumni are working as:

- Environmental Toxicologists
- Environmental Analysts
- Restoration Ecologists
- Marine Resource Managers
- Environmental Consultants
- Ecosystem Managers
- Environmental Educators
- Coastal Ecologists

ALUMNI SPOTLIGHT



I did research at Roger doing water quality testing of the bay water. I was sampling water using professional methods and learned different ways of testing. That turned into an interest in water quality. 

Sean Nugent '20
B.S. in Environmental Science
Water Quality Specialist at SafeWell, Bolton, MA

CURRICULUM

Our first-year students start with foundational courses in biology, geology, chemistry and physics. Students choose upper-level Environmental Science electives that focus their studies on areas that align with their interests, such as ecology, environmental chemistry, geology, and environmental engineering, providing a broad, integrated understanding of earth systems and how humans can reduce their negative impacts on these systems and manage them more sustainably. Students can choose to pursue a Bachelor of Science or Bachelor of Arts degree in Environmental Science.

Upper-Level Coursework

Students choose from upper-level courses, including:

- Marine Geology
- Environmental Monitoring and Analysis
- Soil Ecology
- Meteorology & Climatology
- Urban Ecosystems
- Environmental Toxicology
- Conservation Biology
- Introduction to GIS

Laboratories and Technology

RWU's coastal campus, situated in beautiful southern New England, serves as a natural laboratory for our coursework and research projects. Located just a few hundred yards from Mount Hope Bay in the Narragansett Bay watershed, the Marine and Natural Sciences (MNS) building grants our students and faculty rich opportunities to explore the patterns and processes that shape our on-campus wetlands, ponds, forests, old fields, and coastal ecosystems.

Our local fieldwork is complemented by our MNS facilities, which house advanced laboratory resources including a confocal laser microscope, an epifluorescence microscope, a flow cytometer, a particle counter, thermal cyclers, controlled environmental chambers, and analytical chemistry instrumentation. Research and coursework are also supported by RWU's in-house Wet Lab, Shellfish Hatchery and Farm, Aquatic Diagnostic Laboratory, and greenhouse.

On board RWU's research vessel, the InVinceble Spirit, students launch from our own dock for coursework, water quality testing, or analysis of local ecosystems, and can be back on campus in time for their next class.

Research Opportunities

Undergraduate research is a major part of the Environmental Sciences experience. Many of our students do independent research with our faculty, and present their findings at regional, national, and international conferences. Our faculty have mentored student research in a number of areas, including:

- Water circulation patterns in Narragansett Bay
- Effects of urban landscapes on soil biodiversity
- Trophic Ecology of Jellyfish
- Sediment analyses of Narragansett Bay

Get a Great Internship

Environmental Science students can earn college credit for their major by completing an internship. Our students have worked at leading environmental research agencies and advocacy organizations such as the Nature Conservancy, Save The Bay, World Wildlife Fund, R.I. Department of Environmental Management, and the Audubon Society of Rhode Island.

Prepare for Graduate School

Our majors are well prepared for graduate school; our students have attended University of Rhode Island, Duke University, University of Louisiana, SUNY Albany, and the University of Massachusetts.

**OVER 80% OF
RWU STUDENTS
GRADUATE WITH
MORE THAN JUST
A SINGLE MAJOR**

Design your experience with your passion and have a unique career advantage with a minor or double major. Many students combine **Environmental Science** with:

- Aquaculture and Aquarium Science
- Public Health
- Sustainability Studies
- Political Science
- Biology

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